

IN THE CLAIMS

1. (currently amended) A method of reserving a transmission band of a transmission line for transmitting data via a plurality of Internet service providers on the Internet between a content server and a policy server, the method comprising the steps of:

(a) the content server requesting an intermediary server to reserve the transmission band by transmitting a user policy that includes an ordering number, a requested band, a reservation start date and time, and a reservation end date and time; and

(b) the intermediary server reserving the transmission band for the content server and policy server,

wherein the reserving step further includes the steps of:

receiving the user policy;

storing the received user policy;

searching for IP addresses of policy servers of the plurality of Internet service providers;

transmitting the user policy to each policy server corresponding to one of the plurality of Internet service providers, said each policy server storing the transmitted user policy;

receiving a band reservation result from each corresponding policy server;

determining whether the requested band reservation is confirmed by the band reservation results; and

transmitting the band reservation results to the content server, and

wherein charging data, for charging one or more of a transmitter and a receiver of said data for transmission quality assurance per said plurality of Internet service providers, is

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constructed at one or more of said content server, said intermediary server, and said policy server.

2. (currently amended) The method as claimed in claim 1, wherein the content server transmits IP addresses of the content server and policy server, IP addresses of each of a plurality of routers on the transmission line between the content server and policy server, and ~~a desired~~ the requested band ~~value to be reserved~~ to the intermediary server.

3. (previously presented) The method as claimed in claim 2, wherein the intermediary server identifies a band reservation setting server for each of the plurality of routers from the IP addresses thereof, each of the band reservation setting servers causing its respective router to reserve the transmission band.

4. (previously presented) The method as claimed in claim 3, wherein the intermediary server identifies the band reservation setting servers by referring to a table on which IP addresses of each of the band reservations servers is recorded so as to be correlated with an IP address of its respective router.

5. (previously presented) The method as claimed in claim 3, wherein each of the band reservation setting servers causes its respective router to reserve the transmission band in accordance with band setting requests transmitted from the intermediary server.

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6. (previously presented) The method as claimed in claim 3, further comprising the steps of:

(c) the content server requesting the intermediary server to release the reserved transmission band; and

(d) the intermediary server releasing the reserved transmission band.

7. (original) The method as claimed in claim 6, wherein the intermediary server instructs the band reservation setting servers to release the reserved transmission band.

8. (previously presented) The method as claimed in claim 7, wherein each of the band reservation setting servers causes its respective router to release the reserved transmission band in accordance with a band release request transmitted from the intermediary server.

9. (currently amended) The method as claimed in claim 2, wherein the intermediary server, instead of the ~~desired~~ requested band ~~value~~, utilizes an ID of one of the Internet service providers to which one the policy server is connected and IP addresses of communication devices connected to the one of the Internet service providers, the ID and the IP addresses being transmitted from the one of the Internet service providers.

10. (currently amended) The method as claimed in claim 9, wherein the ~~desired~~ requested band ~~value~~ is a transmission rate at which the policy server is connected to the one of the Internet service providers.

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11. (original) The method as claimed in claim 10, wherein the intermediary server transmits an inquiry about the transmission rate to the one of the Internet service providers.
12. (original) The method as claimed in claim 11, wherein the one of the Internet service providers responds to the inquiry from the intermediary server.
13. (previously presented) The method as claimed in claim 1, wherein the content server transmits IP addresses of the content server and policy server, and IP addresses of routers on the transmission line to the intermediary server.
14. (currently amended) The method as claimed in claim 1, wherein ~~a desired value of the transmission~~ the requested band is a transmission rate at which the policy server is connected to a corresponding one of the Internet service providers.
15. (original) The method as claimed in claim 14, wherein the intermediary server transmits an inquiry about the transmission rate to the corresponding one of the Internet service providers.
16. (original) The method as claimed in claim 15, wherein the corresponding one of the Internet service providers responds to the inquiry from the intermediary server.
17. (previously presented) The method as claimed in claim 1, wherein:

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the policy server is connected to one of the Internet service providers which one includes a copy server having a copy of a content distributed by the content server; and

the content server, based on a request of the policy server for the content, informs the copy server that the content is distributed from the copy server to the policy server by reserving a transmission band between the content server and the policy server.

18. (currently amended) The method as claimed in claim 17, wherein the copy server transmits an IP address thereof, an IP address of the policy server, ~~a desired~~ the requested band ~~value to be reserved~~, and IP addresses of all routers between the copy server and the policy server to the intermediary server.

19. – 25. (canceled)

26. (currently amended) A device for reserving a transmission band of a transmission line for transmitting data via a plurality of Internet service providers (ISPs) on the Internet between a content server and a policy server,

wherein the transmission band is reserved at a request of the content server to reserve the transmission band by transmitting a user policy that includes an ordering number, a requested band, a reservation start date and time, and a reservation end date and time, [[and]]

wherein the device is operable to perform the steps of:

storing IP addresses of policy servers of the ISPs,

storing a request of the content server to reserve the transmission band, including the user policy;

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communicating the user policy over the Internet ~~with the~~ to each policy server[[s]]
corresponding to one of said plurality of ISPs to request reservation of the transmission band,
said each policy server storing the user policy; and
storing results of reservations of the transmission band, the results being returned
from the each policy server[[s]] in response to the reservation requested by the device, and
wherein charging data, for charging one or more of a transmitter and a receiver of said
data for transmission quality assurance per said plurality of ISPs, is constructed at one or more of
said content server, said policy server, and said device.

27. (currently amended) A device for reserving a transmission band of a transmission line for transmitting data via a plurality of Internet service providers (ISPs) on the Internet between a content server and a policy server, the device comprising:

- a first part storing IP addresses of policy servers of the Internet service providers;
- a second part storing a request of the content server to reserve the transmission band, the request including a user policy that includes an ordering number, a requested band, a reservation start date and time, and a reservation end date and time;
- a third part for communicating the user policy over the Internet ~~with the~~ to each policy server[[s]] corresponding to one of said plurality of ISPs to request reservation of the transmission band, said each policy server storing the user policy; and
- a fourth part storing results of reservations of the transmission band, the results being returned by the each policy server[[s]] in response to the reservation request made via the third part,

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wherein the device, upon receiving the request of the content server, refers to the first and second parts to instruct the each policy server[[s]] via the third part to reserve the transmission band, recording the results of the reservations returned from the each policy server[[s]] in the fourth part, and informing the content server whether a reservation of the transmission band is confirmed by analyzing the results stored in the fourth part, and

wherein charging data, for charging one or more of a transmitter and a receiver of said data for transmission quality assurance per said plurality of ISPs, is constructed at one or more of said content server, said policy server, and said device.

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